DIG FOR VICTORY LEAFLET No. 15

POTATO GROWING IN ALLOTMENTS AND GARDENS

POTATOES yield a generous return for a small outlay in money.

Comparatively small areas of land produce sufficient for home requirements : nine rows (3 early, 6 maincrop) are recommended for a 30 ft. × 90 ft. allotment in "Dig for Victory" Leaflet No. 1.

Persons without gardening experience can grow potatoes, provided the following main points are observed.

With soil previously used for growing vegetables, the initial work consists of digging the land deeply in the autumn and leaving it in a rough state so that much of the soil is exposed to the action of the weather. This helps to secure a good tilth. In addition, the digging will expose many injurious insect pests to the birds.

New land, usually unbroken turf, requires special treatment, for most of its natural fertility lies in the turf and top soil, and the sub-soil is usually poor. It is a mistake to pare off the turf and stack it in a heap with the idea of avoiding damage to crops that might result from pests, such as wireworms and leather jackets, in the turf. Any possible gain made in this way is considerably outweighed by the loss of fertility.

When breaking up fresh land, therefore, all turf should be dug-in. If this is done, rotting will take place rapidly.

On Newly Dug Land

Double digging or bastard trenching is recommended. By this method the top spit of fertile soil is retained on the surface and the sub-soil is improved without bringing it to the top. As work proceeds, the turf is pared off thinly, and placed under the top spit of soil.

When double digging any plot of regular shape, it is best to divide it lengthwise into two sections. Begin by taking out a trench 24 in. wide and 12 in. deep across the end of one section. The excavated soil should be removed to the same end of the other section, where the work will finish.

The exposed sub-soil is then forked to a depth of about 10 in. and on this the turves taken from the next 18 in. width of the land are placed grass-side downwards. Chop up the sod with the spade, and if, as indicated by the presence of wireworms or leather jackets, a soil insecticide is required, sprinkle well with naphthalene at the rate of 2 oz. per square yard. (A sharp look-out should be kept for pests when digging, and as many as possible should be collected and destroyed.) The exposed 18 in. width of top soil is then dug and thrown forward on to the inverted turves.

This process is repeated throughout the length of the first section; the second section is then dealt with similarly. The work is completed by filling up the working trench with the turf and soil taken from the first trench on the first section.

Selection and Preparation of Seed

Tubers for planting should be procured each year from a district known to produce good "seed". It is unwise to save for seed, potatoes grown in allotments and gardens. Potato crops on an allotment usually become infected with virus disease.

Seed potatoes should be handled carefully. If the skin is damaged, even if only slightly, the tubers are liable to go rotten during sprouting. Seed potatoes should be examined periodically, and those showing any sign of disease should be destroyed.

To reduce the risk of eelworm infection, all soil clinging to seed potatoes should be washed off with cold water, particular care being taken to remove all soil near the sprouts. Injury to the sprouts should, of course, be avoided.

As soon as seed potatoes are received, they should, if possible, be placed in shallow boxes with the crown or rose end upwards. The boxes should then be placed in a cool shed where light is freely admitted and frost excluded.

In severe weather, the seed should be covered with straw or other protective material against frost damage, but the covering should be removed immediately there is no danger from frost. Potatoes sprouted in this way produce the short, sturdy shoots that make for earliness and high yield.

Two strong shoots on a tuber are sufficient unless it is intended to cut them, in which event there should be sufficient shoots for two to each cut portion. All weak shoots should be removed, and sets that produce long weak shoots under the conditions described above should be rejected altogether.

Roughly 56 lb. of seed should suffice for about 5 rods, but the quantity will vary according to size of seed and planting distances.

Varieties fall into two groups—those susceptible to and those immune from Wart Disease (see Advisory Leaflet No. 274). The Regulations made to prevent the spread of this disease require all potatoes planted or sold for planting in England or Wales to be officially certified, but there has been some relaxation of this requirement to meet present emergency conditions.

Owners are nevertheless strongly advised in their own interests to give preference, when purchasing seed potatoes, to stocks that have been officially certified or are otherwise known to be satisfactory.

On land on which Wart Disease has occurred at any time, only immune varieties may be planted.

Spring Preparation of Soil

With sprouted tubers there is no need for haste. Wait for favourable conditions before planting. A simple way of planting is to take out shallow trenches 2 ft. apart and 4–5 in. deep in heavy soil, and about 6 in. in light land. The distance between the tubers in the row ought to be not less than 12 in. (15 in. for maincrops).

The yield of maincrop varieties from 5 rods of land should be adequate to provide about 1½ lb. of potatoes per day for a year, but very early varieties will not give much more than half this yield, and the proportion of each will need to be considered when making preparations for planting.

Dung and Artificials

Potatoes respond to generous treatment, and farmyard manure or horse manure should be used wherever procurable. On heavy soil the manure should be used in its strawy form and dug in during the autumn. On light soils dig the manure in in spring when it has become well rotted.

Where manure is difficult to obtain used material from the compost heap, or spent hops, hop manure or composted town refuse to supply humus to the soil. On potash deficient soils, give a dressing of wood ashes. As these contain potash.

Supplies of potash manures are limited, but arrangements have been made allowing allotment holders and gardeners to purchase muriate of potash for application to vegetables during the 1942 season at the rate of ½ cwt. to the acre. Potash fertilizers cannot, however, be packed in lots of less than 14 lbs., but most non-professional growers will prefer to purchase their potash already mixed in the form of a compound or general fertilizer. To take a typical example this means that the normal 10-rod allotment holder will be entitled to purchase 42 lbs. of a compound fertilizer containing 5 per cent. potash (K_2O). A portion of this fertilizer should be used at the rate of 3 oz. per square yard on the land intended for potatoes. The best method is to give a dressing of 1½ oz. per square yard forked in before planting. Sow the remainder in the drills before planting the sets at the rate of 1 lb. per 45 feet of row. Tubers should not be dusted with artificials, as the eye or sprout may be damaged.

It is not advisable to apply lime to cultivated soil in the same season in which it is proposed to crop with potatoes.

Early Cultivation

During the period of active growth, land should be hoed and kept free from weeds. If there is danger of frost just when the growths appear, they should be lightly covered with soil.

The first earthing-up of the plants may be undertaken when they are some 6 in. high, and further soil should be drawn up to form a ridge about three weeks later. Earthing-up helps to keep the haulms upright, and prevents the tubers being exposed to light. Incidentally, a good covering of soil over the tubers is of protective value to them in case of an outbreak of Blight on the foliage. This will not obviate the necessity for spraying with Burgundy or Bordeaux mixtures, which is, of course, the main precautionary measure to be taken against attacks of Blight. *Further information on Blight and on the preparation of Burgundy and Bordeaux Mixtures in small quantities is given in "Dig for Victory" Leaflet No. 17.*

Throughout the growing season a watch should be kept for adults or grubs of the Colorado Beetle (see Advisory Leaflet No. 71). If any suspects are discovered, specimens should be forwarded immediately to the Ministry of Agriculture and Fisheries, Plant Pathological Laboratory, Milton Road, Harpenden, Herts., and no other steps taken until instructions are received from the Ministry.

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